INTRODUCTION

Global engagement between US schools and colleges of pharmacy and international institutions is increasing. In the United States, many schools and colleges of pharmacy have established a global strategic plan and augmented recruitment efforts to sustain operations in an increasingly competitive environment while providing their students with an enriching international experience, global citizenship, and cultural competency.1-3 Internationally, many schools of pharmacy have been established over the last several years. This has resulted in calls for a moratorium by the International Pharmaceutical Education (FIP) on starting new pharmacy schools,4 and an increased interest in the role pharmacists can play as a member of the health care team. Thus, providing new job opportunities for pharmacy graduates by mirroring the educational and advanced pharmacy practice experiences (APPE) programs in the United States and other countries became critical. According to the Accreditation Council for Pharmacy Education (ACPE), as of April 2019, there were 142 Doctor of Pharmacy (PharmD) programs in the United States with an accreditation status of full, candidate, or precandidate.5 The PharmD degree is the entry-level degree required to practice pharmacy in the United States. As shared in the introduction paper to this special issue,6 since the United States is home to more than 60% of the world’s top 100 universities, it is a major destination for international students and faculty members who wish to pursue higher education and further
training opportunities. In addition, because of internal regulations, international programs are increasingly seeking external validation and quality assurance, often looking to establish associations with US pharmacy organizations to enhance the quality and credibility of their own programs. Some of the programs have secured accreditation or certification from ACPE for degree programs and from the American Society of Health-System Pharmacists (ASHP) for residency programs. In contrast to accreditation, ACPE certification is granted or continued to a professional pharmacy program in a country outside the United States that “demonstrates compliance with most or all quality criteria and meets all ACPE’s requirements for such recognition.”

American culture is relatively familiar to people in many regions of the world. However, many think of the US as having a coherent culture when in reality it is home to multiple cultures with people from diverse backgrounds and health practices that vary within each region of the country, as well as within each state and city. Thus, it is essential for international students and faculty members coming to the United States to be aware of US cultural, historical, religious, and political issues that may affect their level of engagement. This paper aims to serve as a resource for international pharmacy programs that are currently engaged or considering future outreach opportunities in the United States to think about some of the key aspects of the American “realities” to ensure that their students and faculty members have a purposeful, fruitful, and enriching experience.

METHODS

The general methodology used in gathering information for this paper was discussed in the introduction to this special issue. The keywords and terms used in this search included: United States, US, USA, Bureau of US Census, US regions, and individual state names. Websites of the US government, schools and colleges of pharmacy, and professional pharmacy organizations also were reviewed. Further, authors and reviewers representing various disciplines of pharmacy education and from various parts of the United States were asked to contribute to the manuscript.

United States of America

The United States of America is commonly referred to simply as the United States or as America. The United States is the part of North America being positioned between Canada and Mexico, and borders both the North Atlantic Ocean and the North Pacific Ocean. There are 325 million Americans living within 3.8 million square miles. The country is diverse consisting of 50 states (48 contiguous states and Alaska and Hawaii) located across several regions, one federal district (Washington, DC), and five major governing territories. The boundaries of US regions vary from one source to another. A modification of the US Census’ designation of US regions will be used for the purposes of this paper (Figure 1). Rather than being an exhaustive guide to every aspect of the country, this paper includes information that would be of greatest interest to international students and faculty members. It is intended to inspire these guests as well as future visitors to learn more about the culture of the institution, city, and state where they are or will be training.

The United States does not use the metric system routinely and familiarity with conversions to the imperial system is important (eg, temperature, weight, distance, etc), especially for visiting scientists and health professionals. Major sports in the US are American football, basketball, and major league baseball. This is followed by ice hockey and soccer. Many people also play golf, lacrosse, tennis, and volleyball. Attending sports events and watching them on television is a major aspect of American culture.

Unique Aspects to Regions

Northwest. The Northwest region of the United States includes the states of Alaska, Idaho, Montana, Oregon, Washington, and Wyoming. The most populated city in each state is Anchorage, Boise, Billings, Portland, Seattle, and Cheyenne, respectively. The weather in the Northwest remains mild throughout the year with significant fog and rain, except for in Alaska, which can see weather extremes in both summer and winter. Compared to the country as a whole, all of the Northwest states except for Alaska have large white populations, (80% in Washington, 87% in Oregon, 89% in Idaho and Montana, and 93% in Wyoming), which includes Hispanics and Latinos (4% in Washington and 2% in Oregon). Black or African-American populations in this region are small. Washington and Oregon have a relatively large Asian population (9% and 5%, respectively). Considering the geographic location, American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders are also present in the Northwest region.

The number of pharmacy schools in the Northwest region is relatively small compared to the number in other regions. The University of Washington (public) and Washington State University (public) are in Washington; Oregon State University (public) and Pacific University (private) are in Oregon. Only one pharmacy school exists in each of the following states: Idaho (Idaho State University, public), Montana (University of Montana, public), Wyoming (University of Wyoming, public).
Students from Alaska are often admitted to pharmacy schools in the Northwest region; however, they can now earn a PharmD degree without leaving the state through a new partnership between the University of Alaska Anchorage and Idaho State University.12

The Northwest is considered politically and socially liberal compared to the rest of the United States. Liberals are those who are not as apt to adhere to cultural norms or traditional ways of doing things and are open to new behaviors or opinions regarding social, religious, and political affairs. Conservatives, alternatively, tend to adhere to traditional ways of doing things and are cautious about changes in social, religious, or political affairs.13 For example, the states of the Northwest region were among the first in the nation to legalize same-sex marriage, well before the US Supreme Court ruled that all states must allow the practice.14 Especially in the Pacific Northwest regions, LGBTQ2 (lesbian, gay, bisexual, transsexual, queer, questioning) communities are strong. The numbers of same-sex couples per thousand households were 7.8 in Oregon, 7.3 in Washington, 3.5 in Montana, and 3.2 in Wyoming in 2016.15 Therefore, LGBTQ2 patients are commonly seen in health care settings in these states.

The Northwest region is known to have a progressive scope of pharmacy practice. For example, the Washington State Pharmacists Association initiated the first training for pharmacists to administer vaccines in 1994, which was before the American Pharmacists Association (APhA) began its nationally recognized training program in 1996.16 Although preferred, neither a protocol nor prescription is needed for pharmacists to administer vaccines in Idaho, Montana, Oregon, and Wyoming.17 In Idaho, pharmacists may delegate the task of administering an immunization to appropriately credentialed technicians.18 Based on statewide protocol, pharmacists may prescribe or dispense naloxone to individuals believed to be experiencing or be at risk of experiencing an
opioid-related overdose in Idaho, Oregon, and Wyoming; a statewide standing order is needed in Montana and Washington. Pharmacists can legally prescribe hormonal birth control pills in Oregon and Washington. Because it is common for pharmacy students to cross state lines during their APPEs (eg, travel from their school in Portland, Oregon, to their APPE location in Washington) many students are expected to obtain intern licenses in both states. The Northwest states have many rural areas, and rural medicine represents another unique opportunity and challenge in this region. Certain federally funded facilities and clinics exist to serve immigrants, and many providers speak Spanish in these facilities. These places may be good locations to complete an internship, particularly for those international visitors who speak Spanish fluently.

**West.** The West region of the United States consists of the states of California, Nevada, and Hawaii, which is located more than five hours by plane off the coast of California. The largest cities in California are Los Angeles, San Diego, San Jose, and San Francisco, and the largest city in Nevada is Las Vegas. California is by far the most populous (38.9 million) state in the West and the third most extensive in area. Whites and Hispanics are the two largest racial and ethnic groups in California, respectively due to its proximity to Mexico and Latin America, followed by Asians due to large numbers of immigrants from China, Japan, Philippines, and Vietnam. There is also a sizeable black or African-American. Because of this increased immigration and diversity, there are large segments of California’s population that may not be fluent in English and will require health care interpreters to assist with care provision. California has pleasant weather year-round, similar to that of the Mediterranean, whereas Nevada has a desert-like climate. California is viewed as progressive and liberal whereas Nevada, with the exception of urban areas, is viewed as conservative. There is a large concentration of biotechnology and pharmaceutical companies in California in addition to several world-renowned hospitals such as the University of California San Francisco Medical Center, the University of California Los Angeles Medical Center, Stanford Hospital, and Cedars-Sinai Medical Center. California is home to 13 schools and colleges of pharmacy, including two of the top 20 in the nation (the University of California San Francisco and the University of Southern California). Nevada is home to only one college of pharmacy, located at Roseman University of Health Sciences. In the past, many of the students from Hawaii who wished to pursue pharmacy applied to pharmacy schools elsewhere in the West; however, they can now earn a PharmD degree without leaving their state through the newly established pharmacy school at the University of Hawaii at Hilo. California is known to have a progressive scope of pharmacy practice. Pharmacists are officially recognized as health care providers and have the option to obtain an advanced practice pharmacist designation from the California State Board of Pharmacy that allows them to prescribe certain products, including self-administered contraceptives, immunizations, travel medications, smoking cessation therapy, and naloxone.

**Southwest.** The Southwest region of the United States consists of six states including Arizona, Colorado, New Mexico, Oklahoma, Texas, and Utah. Texas is the second most populous state in the country and nation with 28 million people and the second largest in area. Major cities of the Midwest include Phoenix and Tucson in Arizona; Denver and Colorado Springs in Colorado; Albuquerque in New Mexico; Oklahoma City and Tulsa in Oklahoma; Houston, San Antonio, Dallas, Austin, Fort Worth, and El Paso in Texas; and Salt Lake City in Utah. Caucasians are the largest ethnic group and Hispanics form a large and rapidly growing minority because of the proximity of the area to Latin America. Hispanics are the majority in New Mexico. With the exception of Colorado and Utah, which have cold winters, the Southwest is the hottest region in the United States. Texas, Oklahoma, and Utah are generally viewed as conservative, whereas Arizona, Colorado, and New Mexico are viewed as balanced in terms of ideology, with equal numbers of conservatives and liberals. Texas Medical Center is the largest medical center in the world and includes the world-renowned M.D. Anderson Cancer Center. Texas is home to nine schools and colleges of pharmacy three of which are among the top 20 schools and colleges of pharmacy in the country according to one ranking (The University of Texas at Austin, the University of Arizona, and the University of Utah). One state in this region, Colorado, became the first state in 2012 to pass a law legalizing the recreational use of marijuana.
responsible for the majority of all US agricultural production. People from the Midwest are usually considered to be very friendly. Some of the best hospitals in the country are located in the Midwest: Mayo Clinic, Cleveland Clinic, and University of Michigan Hospitals. The Midwest is home to eight of the top 20 schools and colleges of pharmacy according to one ranking: The University of Minnesota, the University of Michigan, the Ohio State University, the University of Illinois in Chicago, Purdue University, the University of Wisconsin in Madison, and the University of Iowa.

**Southeast.** The Southeast region of the United States consists of the following nine states: Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee. Birmingham, Little Rock, Atlanta, Jacksonville, Louisville, New Orleans, Jackson, Charlotte, Columbia and Nashville are the largest cities in each of these states, respectively. The Southeast has grown rapidly because of a large movement in the retirement population drawn to the area because of mild weather and an affordable cost of living. Florida recently surpassed New York as the third most populous state (21 million) in the country. All of the cities listed above have seen significant population growth in the past 10 years. Caucasians are the largest racial group followed by African Americans and there is an increasing Hispanic population in AL, FL, and GA due to proximity to Cuba and Latin America. While these statewide statistics are true, several counties in each state have a majority population of African Americans. The Southeast region is mild during the winter, but hot in the summer, with the highest humidity of any US region. The Southeast is considered very conservative overall, with most of the population identifying as Christian and Protestant. People living in urban areas of the Southeast are generally more liberal, and significant populations are not Christian. Racism remains a sensitive topic in the United States in general and in the Southeast in particular, with some areas less tolerant of diversity than other areas. The Southeastern states pride themselves on being quite diverse and may find it offensive when visitors assume that racial biases exist. Southern culture is based on hospitality and friendliness, which often is startling to those not familiar with this manner of relating to strangers. Natives of the area speak with a distinct southern accent that draws out words, which visitors often find charming.

The Southeast is home to four of the country’s top 20 schools and colleges of pharmacy according to one ranking: University of North Carolina at Chapel Hill, University of Florida, University of Kentucky, and University of Tennessee. Pharmacy practice is varied in the South, with North Carolina and Tennessee being among those states that grant pharmacists provider status, allowing them to bill for managing patients’ pharmacotherapy upon referral and/or independently. Alabama, Mississippi, and Tennessee were among the very first states to allow pharmacists the authority to administer vaccines. Pharmacists and supervised student pharmacists may vaccinate in all states in the region. Naloxone access is widespread, with standing orders or protocols, or pharmacist prescribing available throughout the region.

**Mid-Atlantic.** The Mid-Atlantic region of the United States, located in the center of the East Coast, is composed of seven states, including Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, and West Virginia, and a federal district, Washington, DC. Wilmington, Baltimore, Newark, New York City, Philadelphia, Virginia Beach, and Charleston are the largest cities, respectively, within each state. In the 19th century, the region was settled by a diverse population of Dutch, Swede, and English Catholics and Protestants including the Friends (Quakers). Although all these settlements eventually fell under English control, the region continued to attract a diverse population with varying nationalities. That diversity can still be found today, often in large cities like New York and Philadelphia, as well as in Washington, DC. The Mid-Atlantic region may be the most ethnically diverse region in the country. For example, New York City is home to over three million foreign-born residents, and collectively, the citizens speak over 200 languages. The Mid-Atlantic region is considered liberal, with the exception of West Virginia and rural areas of New York and Pennsylvania. Virginia tends to represent a balance of conservative and liberal ideals. Roughly one-third of the entire US population lives in the Mid-Atlantic region. The Mid-Atlantic region has varied geography, from coastal lowlands around the bays and the Atlantic Ocean, to the tall Appalachian Mountains. This region experiences all four seasons, and occasionally is hit with storms that can result in several feet of snow accumulation.

Over the past decades, the Mid-Atlantic region has seen much growth. The region’s strongest sectors include financial and business services, health care, biomedicine, food processing, and energy. The Mid-Atlantic region is home to some of the world’s top biomedical research facilities, including the National Institutes of Health, the Food and Drug Administration, and Johns Hopkins University. Pennsylvania not only houses more than 2300 pharmaceutical, biotechnology, and medical device companies, but also has access to large oil and gas deposits now being mined. The expanding solar energy capacity
and offshore wind farms in New York and Maryland further advance the use of sustainable energy.49

With the exception of Delaware, all states and the District of Columbia have schools that educate student pharmacists to enter the pharmacy workforce. New York is home to eight schools and colleges of pharmacy and the area is home to three top 20 schools and colleges of pharmacy: The University of Maryland in Baltimore, the University of Pittsburgh, and Virginia Commonwealth University.56 Unique to the area, the Mid-Atlantic region is home to many prominent pharmacy associations, with the headquarters of the APhA, the American Society of Health-System Pharmacists (ASHP), and the National Community Pharmacists Association (NCPA) in Washington, DC, Maryland, and Virginia, respectively. Despite that, some areas in the Mid-Atlantic region still need to make some progress in advancing clinical pharmacy services. For example, in New Jersey and New York, it is not legal for pharmacy students to administer vaccinations to the public, despite having specific training in this area.50 As clinical pharmacy practice advances, collaborative practice with physicians continues to grow in many states across the country. However, in Washington, DC, collaborative practice agreements are still not a standard, hindering the ability for pharmacists to reach their full potential in practice.33,51

Northeast. The Northeast region of the United States consists of six states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. The largest city in each of the states is Bridgeport, Portland, Boston, Manchester, Providence, and Burlington, respectively. The northeast is also known as New England.52 Racially, Caucasians represent the largest group, with Hispanics followed by African-American as the largest ethnic groups. The region is predominantly Roman Catholic, with a large Irish population compared to that in some regions of the United States. The region also has a high number of Hindus, Sikhs, Muslims and Buddhists.53 The Northeast has four distinct seasons, with cold, snowy winters, mild autumns and springs, and hot summers.53 The Northeast is considered liberal.53

Boston, one of the oldest cities in the United States, is home to Massachusetts General Hospital, which is the original and largest teaching hospital of Harvard Medical School and a world-renowned biomedical research facility.54 Boston is also known for its Longwood Medical and Academic Area (LMA), which is a thriving integrated community of medical, academic, research, and cultural organizations including Brigham and Women’s Hospital, Boston Children’s Hospital, Joslin Diabetes Center, and Dana-Farber Cancer Institute.55 Many universities and colleges located in the LMA partner with these hospitals to provide learning opportunities, including pharmacy practice experiences. While the Northeast is host to 10 schools and colleges of pharmacy,7 the Massachusetts College of Pharmacy and Health Sciences has a campus in New Hampshire while Vermont has no pharmacy program.

Pharmacists in the region, similar to those in other areas, can vaccinate patients with varying degrees of independence. However, as of 2016, New Hampshire was one of three states that did not allow student pharmacists to vaccinate.17 All states have some form of naloxone dispensing, with Connecticut and Vermont being the least restrictive.19

The United States at a Glance

Politics and Economy. The Federal Government of the United States presides over all the regions of the country and is composed of three major branches: legislative, executive, and judicial. The legislative branch is the Congress, which consists of the House of Representatives and the Senate. The executive branch consists of the President, Vice President, Cabinet, and executive departments and agencies. Democrats and Republicans are the major political parties in the United States. The Democrats are considered more liberal regarding social, religious, and political issues, whereas Republicans are considered more conservative about these issues.56 The three branches of government provide a system of checks and balances so no one branch can unilaterally run the country independent of the other two. More detailed information about the US government can be accessed at the official website of the US government (https://www.usa.gov/).

Some of the main federal holidays in the United States include New Year’s Day, birthday of Martin Luther King, Jr., Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.56 Most government offices, public and private universities and schools, and private businesses, as well as many medical, dental, and pharmacy practices, are closed on these major holidays. However, major medical centers and large chain pharmacies are typically open even on holidays. Work hours vary depending on the organization, but in general, hospitals and some pharmacies are open 24 hours a day and pharmacists often work one of three shifts (7:00 AM-3:30 PM; 3:00 PM-11:00 PM, or 10:00 PM-7:00 AM). Depending on Board of Pharmacy regulations within the state, there may be limitations for hours worked per day for a pharmacist.

The US economy is a technologically powerful economy with products developed by US firms at the forefront in the computer, pharmaceutical, medical, aerospace, and
military equipment industries. The United States has a primarily market economy in which the federal and state governments buy needed goods and services predominately from the private commercial sector.\textsuperscript{57} Long-term issues for the United States include stagnation of wages for workers in blue collar jobs and unskilled labor, quickly rising medical and pension costs of a maturing population, energy shortages, and budget deficits.\textsuperscript{57} Even with the recent trend in growth of the country\textquotesingle s gross domestic product, salaries in most sectors including pharmacy have remained stagnant and job opportunities for new graduates have declined from pre-recession levels.\textsuperscript{57}

**Culture, Ethnicity and Religion.** America is one of the most culturally diverse countries in the world with people moving to the US from all parts of the globe for education, work, or to be reunited with their families. The US Census Bureau officially recognizes racial categories of White American, Black or African American, Indian and Alaska Native, Asian American, Native Hawaiian and Other Pacific Islander, and people of two or more races; a category called "some other race." Of these, people who are white, occupied the major group. However, the US Census Bureau predicts that within the next 50 years, nearly one-half (48\%) of the nation\textquotesingle s population will be races other than white.\textsuperscript{58}

English is by far the most spoken language in the United States and is the primary language of instruction including in higher education and in health care documentation. However, there are many other languages spoken in homes across the country by people from various ethnic backgrounds. Of these, Spanish is the second most frequently spoken language because of the large Hispanic community in the United States.\textsuperscript{59} Christianity is the dominant religion in the United States, with the majority of Christians belonging to or identifying with one of the Protestant denominations, and the remainder belonging to the Roman Catholic Church, which represents the single largest Christian denomination in the country. Other major religions represented in the United States include but are not limited to Buddhism, Hinduism, Judaism and Islam.\textsuperscript{60} Almost a quarter of Americans consider themselves irreligious.\textsuperscript{61}

**Health Care System and Regulations.** According to the National Health Expenditures 2017 Highlights, US health care spending increased 3.9\% to reach $3.5 trillion, or $10,739 per person, in 2017.\textsuperscript{62} The US does not have a standard health system or universal health care coverage as seen in other developed nations.\textsuperscript{63} Federal Medicare and Medicaid systems insure health care coverage for senior citizens, individuals who are disabled, and people whose earnings fall below the poverty line.\textsuperscript{65} Medicaid is a joint federal and state initiative, so each state has different Medicaid requirements. Other citizens rely on some other form of health insurance, with almost 65\% obtaining private insurance either individually (7.7\%) or through their employer (57.2\%).\textsuperscript{63} Health insurance providers are generally separate private companies and deal with a wide range of different health care providers.\textsuperscript{64} Patients with private insurance pay monthly health insurance fees, and when they see a provider or visit a clinic or hospital, they pay copayments and/or deductibles, depending on the type of insurance they have. Insurance providers will usually cover services considered necessary by doctors, but often will not cover services that are considered "elective" (nonessential).

The Patient Protection and Affordable Care Act (PPACA), commonly referred to as “Obamacare,” was passed in 2010 to attempt to address some of the shortcomings of the US health care system.\textsuperscript{66} This dropped the number of uninsured rate among the nonelderly population from over 16.8\% in 2013 to 10.2\% in 2017.\textsuperscript{64} Despite this legislation, health care costs have continued to rise. With the change in government leadership after the national election in 2016, this legislation has been significantly criticized and some of the provisions of the PPACA have been rescinded, such as allowing people to take out short-term policies. This change led to an estimated 9 million fewer Americans being insured in 2019 and an increase of 18.2\% in the premiums for Obamacare insurance in the 43 states that do not prohibit or limit the implementation of short-term policies.\textsuperscript{67}

Health disparities, defined as "variations in rates of disease and disabilities between socioeconomic and/or geographically defined population groups" are a consequence of differences in access to or availability of health insurance and health care services.\textsuperscript{68} In the United States, minority groups such as African Americans and Hispanics suffer from both. As a result, life expectancy in the United States is still lower than in other developed countries, especially among minorities. Minorities also have a higher incidence of diseases such as asthma, diabetes, human immunodeficiency virus (HIV) infection, and infant mortality.\textsuperscript{69,70} The US Department of Health and Human Services published an action plan to reduce racial and ethnic health disparities.\textsuperscript{71} The Institute of Medicine (IoM) has stated that greater diversity within health care professionals leads to improved patient outcomes. In fact, the concept of diversity and inclusion has been increasingly emphasized in the United States, along with an effort to have a health care force that is culturally representative of the population it serves.\textsuperscript{72} Regulation plays a major role in the health care industry and insurance coverage. Federal health care laws are constantly changing, and ideally, all health care professionals should stay up to date regarding health care
laws. A list of select national health care organizations and their area of focus is given in Table 1.

**Pharmacy Education.** Pharmacy programs have undergone significant reforms over the last three decades. As of 2000, pharmacists who are trained in the United States must earn a PharmD degree. The PharmD is now the entry-level degree to practice pharmacy in the United States. As shared above, there are currently 145 schools and colleges of pharmacy in the United States, with approximately 36,000 students enrolled and 15,000 graduates every year from public and private institutions. A number of schools and colleges of pharmacy offer their PharmD program either at a distance or on satellite campuses as well. Attending pharmacy school in the United States is an expensive undertaking, particularly at private institutions, and many students have more than $200,000 in loans upon graduation.

The ACPE is the only agency recognized by the US Department of Education (USDE) to accredit PharmD programs. Pharmacy programs must meet all 25 accreditation standards in order to be considered for continuing accreditation. PharmD programs emphasize a patient-centered approach as opposed to a product-centered focus. Graduates are expected to be practice ready. The majority of PharmD programs in the United States require applicants to have at least two years of prepharmacy study prior to admission. However, some programs may require the applicant to have three years of prerequisites or a bachelor’s degree. Additionally, all US schools and colleges of pharmacy require an interview with a candidate before admission, and the majority require applicants to sit for the Pharmacy College Admissions Test (PCAT).

The PharmD program generally takes four years to complete and includes didactic instruction and experiential education. However, there are some schools and colleges of pharmacy that offer an accelerated three-year PharmD program. The didactic curriculum includes a strong foundation of basic sciences; pharmaceutical sciences; social,
behavioral, and administrative sciences; and clinical sciences. It emphasizes active learning, critical thinking, communication skills, leadership development, and lifelong learning. The experiential curriculum is approximately one third of the curriculum and includes introductory pharmacy practice experiences (IPPEs), which introduce the students to community and health-system pharmacy practice, and advanced pharmacy practice experiences (APPEs), which emphasize hands-on experience relevant to pharmacy practice and skills necessary for students to be practice-ready entry-level pharmacists. ACPE requires PharmD students to complete 1440 hours of APPEs in at least four required settings: community, ambulatory care, health-system, and general medicine. According to the newest ACPE standards, schools and colleges of pharmacy should also provide interprofessional education (IPE) to all students in both the didactic and experiential curricula so that students are ready upon graduation to function as an integral part of a health care team.

ACPE also requires schools and colleges of pharmacy to administer the Pharmacy Curriculum Outcomes Assessment (PCOA), which is a comprehensive external measure of student performance, at least once after PharmD students have completed the didactic curriculum. Successful completion of both the didactic and experiential curricula prepares students to sit for the North American Pharmacist Licensure Examination (NAPLEX), which is a comprehensive examination designed to test minimal competency in pharmacy practice, and the Multistate Pharmacy Jurisprudence Examination (MPJE) which is a state-specific examination designed to test minimal competency in federal and state-specific laws, rules, and regulations that govern pharmacy practice. Passing both the NAPLEX and MPJE enables students to apply for state-specific pharmacy licensure. Some PharmD graduates seek additional training through postgraduate year 1 (PGY1) pharmacy residency programs and postgraduate year 2 (PGY2) specialty pharmacy residency programs or fellowships. Some may also seek certification programs or certificate programs to ensure competency and facilitate growth and development in a specialized area of pharmacy practice.

The Board of Pharmacy Specialties (BPS) oversees pharmacy-specific post-licensure certification. The BPS establishes standards for certification and recertification of pharmacists in 12 recognized pharmacy practice specialties: ambulatory care, cardiology, compounded sterile preparations, critical care, geriatrics, infectious diseases, nuclear medicine, nutrition support, oncology, pediatrics, pharmacotherapy, and psychiatry. Other organizations administer certification programs that are open to several health care professionals such as the National Certification Board for Diabetes Educators (NCBDE), which administers a diabetes education certification program, and the American Academy of HIV Medicine (AAHIVM), which administers an HIV certification program. Certificate programs are practice-based continuing education programs that are narrower in scope than certification programs. Examples of certificate programs include the pharmacy-based immunization delivery course offered by the APhA. Some PharmD graduates may also seek additional degrees such as a master’s degree (eg, master of business administration, master of health administration, master of public health), PhD degrees (eg, medicinal chemistry, pharmacology, pharmaceutics), and/or other professional degrees (eg, law, medicine, veterinary medicine). Select pharmacy education peer-reviewed journals that publish updates on various aspects of pharmacy education in the United States and throughout the world are listed in Table 3.

International students can apply to a PharmD program, but US schools and colleges of pharmacy require that they complete the prepharmacy program at an accredited school in the United States. International students can also take advantage of established exchange programs between their institutions and a US institution to complete training experiences in the United States. The University of Arizona College of Pharmacy offers an Advanced Clinical Pharmacy Practice Grad Certificate for international scholars with a pharmacy degree from outside the United States. The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences has established an International-Trained PharmD (ITPD) Program. Samford University’s McWhorter School of Pharmacy (Alabama) offers a summer International Pharmacy Scholars Program with a completion certificate for global scholars. International students with an F1 visa will be able to participate in experiential experiences and hands-on activities, while others (eg, J1 visa) can participate in shadowing experiences.

**Pharmacy Practice.** Pharmacists are among the most trusted and accessible health care professionals in the United States. Historically, the pharmacist’s role in health care was centered on dispensing medications in accordance with prescriptions and making sure that medications are taken according to instructions. Preventative care and the clinical aspect of the profession were not emphasized. In this era of team-based health care, pharmacists are needed as medication experts on the team to promote health, optimize drug therapy outcomes, and prevent drug errors, adverse events, hospitalizations and readmissions, with the ultimate goal of providing patients with a better quality of life. Thus, graduating pharmacists are playing a vital role in patient care services such as patient education, medication therapy management (MTM),
Stereotypes and Misconceptions About the United States

The most prevalent misconception of visitors to the United States is that it is a land of unlimited opportunity where the majority of people are living the “American Dream.” This misconception along with several other misconceptions and stereotypes that have been broadcast by the media of other countries and sometimes perpetuated by America’s own media are addressed below.

Materialism/Extravagance/Wastefulness. Excessive emphasis on the pursuit of the American Dream and high consumption of goods by the American people has resulted in some of the most common stereotypes of Americans: materialistic, wasteful, and only caring about personal belongings and individual wealth. While consumerism is present in societies all over the world, in the United States, it is extensive and heavily promoted in the media. Even prescription medications are advertised heavily on television and radio and in magazines. The business and professional competition typical in a capitalist society, the constant availability of products from within and outside the country, and seemingly endless innovation in the US marketplace make consumers want to buy the latest of everything. Nevertheless, Americans in all sectors of society are generous and provide donations to local, national, and international organizations.

In addition, in the American culture, tipping of workers, particularly those in the service industry is a social norm practice and people are willing to do so. Further, while big houses and cars are still the norm for many Americans, it is important to recognize that an increasing number of Americans have elected to downsize, use public transportation, and bike or walk to work and school.

In stark contrast to the prosperity many Americans enjoy, visitors to the United States will recognize that poverty is a major issue, with an estimated 39.7 million (12.3%) people living in poverty in 2017. Mississippi (21.9%) followed by New Mexico (20.6%) and Louisiana (19.9%) are US states with the highest poverty rate. New Hampshire has the lowest (9.2%).

Violence. The United States has a high death rate caused by firearms (12 per 100,000) with Alaska having the highest (24.5). The causes do include accidental discharge of firearms as well as intentional self-harm by firearm, assault by firearm, firearm discharge, undetermined intent and legal intervention involving firearm discharge. This has been associated with the fact that the United States is ranked number one in the world in gun ownership. However, gun ownership is concentrated with less than 1 in 3 Americans owns any guns at all. While most Americans believe in the right to bear arms, many are in favor of restrictions on gun ownership.
<table>
<thead>
<tr>
<th>Pharmacy Organization</th>
<th>Area of Focus</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Zeta Omega (AZO)</td>
<td>Pharmaceutical fraternity</td>
<td><a href="http://www.azo.org">www.azo.org</a></td>
</tr>
<tr>
<td>American Association of Colleges of Pharmacy (AACP)</td>
<td>Academic pharmacy</td>
<td><a href="http://www.aacp.org">www.aacp.org</a></td>
</tr>
<tr>
<td>American Association of Pharmaceutical Sciences (AAPS)</td>
<td>Pharmaceutics and other pharmacy sciences</td>
<td><a href="http://www.aaps.org">www.aaps.org</a></td>
</tr>
<tr>
<td>American College of Clinical Pharmacy (ACCP)</td>
<td>Clinical pharmacy and pharmacotherapy</td>
<td><a href="http://www.accp.com">www.accp.com</a></td>
</tr>
<tr>
<td>Accreditation Council for Pharmacy Education (ACPE)</td>
<td>Accreditation of PharmD and continuing education programs</td>
<td><a href="http://www.acpe-accredit.org">www.acpe-accredit.org</a></td>
</tr>
<tr>
<td>Academy of Managed Care Pharmacy (AMCP)</td>
<td>Managed care pharmacy and specialty pharmacy</td>
<td><a href="http://www.amcp.org">www.amcp.org</a></td>
</tr>
<tr>
<td>American Pharmacists Association (APhA)</td>
<td>Community pharmacists and pharmacists from other areas of practice</td>
<td><a href="http://www.pharmacist.com">www.pharmacist.com</a></td>
</tr>
<tr>
<td>American Society of Consultant Pharmacists (ASCP)</td>
<td>Consultant pharmacy, long-term care pharmacy, and geriatric pharmacy</td>
<td><a href="http://www.ascp.com">www.ascp.com</a></td>
</tr>
<tr>
<td>American Society of Health-System Pharmacists (ASHP)</td>
<td>Health-system pharmacy including hospital and ambulatory care pharmacy</td>
<td><a href="http://www.ashp.org">www.ashp.org</a></td>
</tr>
<tr>
<td>Board of Pharmacy Specialties (BPS)</td>
<td>Board certification for pharmacists</td>
<td><a href="http://www.bpsweb.org">www.bpsweb.org</a></td>
</tr>
<tr>
<td>Christian Pharmacists Fellowship International (CPF)</td>
<td>Faith-based pharmacy and medical missions</td>
<td><a href="http://www.cpfi.org">www.cpfi.org</a></td>
</tr>
<tr>
<td>College of Psychiatric and Neurologic Pharmacists (CPNP)</td>
<td>Psychiatry and neurologic pharmacy</td>
<td><a href="http://www.cpnp.org">www.cpnp.org</a></td>
</tr>
<tr>
<td>Hematology Oncology Pharmacist Association (HOPA)</td>
<td>Hematology and oncology pharmacy</td>
<td><a href="http://www.hoparx.org">www.hoparx.org</a></td>
</tr>
<tr>
<td>International Society for Pharmacoconomics and Outcomes Research (ISPOR)</td>
<td>Pharmacoconomics and outcomes research</td>
<td><a href="http://www.ispor.org">www.ispor.org</a></td>
</tr>
<tr>
<td>Kappa Epsilon (KE)</td>
<td>Pharmaceutical fraternity</td>
<td><a href="http://www.kappaepsilon.org">www.kappaepsilon.org</a></td>
</tr>
<tr>
<td>Kappa Psi (KY)</td>
<td>Pharmaceutical fraternity</td>
<td><a href="http://www.kappapsi.org">www.kappapsi.org</a></td>
</tr>
<tr>
<td>Lambda Kappa Sigma (LKS)</td>
<td>Pharmaceutical fraternity</td>
<td><a href="http://www.lks.org">www.lks.org</a></td>
</tr>
<tr>
<td>National Association of Boards of Pharmacy (NABP)</td>
<td>Pharmacy licensure and competence</td>
<td><a href="http://www.nabp.pharmacy">www.nabp.pharmacy</a></td>
</tr>
<tr>
<td>National Association of Chain Drug Stores (NACDS)</td>
<td>Chain community pharmacy</td>
<td><a href="http://www.nacds.org">www.nacds.org</a></td>
</tr>
<tr>
<td>National Community Pharmacy Association (NCPhA)</td>
<td>Community pharmacy and ownership</td>
<td><a href="http://www.ncpanet.org">www.ncpanet.org</a></td>
</tr>
<tr>
<td>National Pharmaceutical Association (NPhA)</td>
<td>Minority pharmacists</td>
<td><a href="http://www.nationalpharmaceuticalassociation.org">www.nationalpharmaceuticalassociation.org</a></td>
</tr>
<tr>
<td>Pediatric Pharmacy Advocacy Group (PPAG)</td>
<td>Pediatric pharmacy</td>
<td><a href="http://www.ppag.org">www.ppag.org</a></td>
</tr>
<tr>
<td>Phi Delta Chi (PDC)</td>
<td>Pharmaceutical fraternity</td>
<td><a href="http://www.phideltachi.org">www.phideltachi.org</a></td>
</tr>
<tr>
<td>Phi Lambda Sigma</td>
<td>Pharmacy Leadership</td>
<td><a href="http://www.philamdasigma.org">www.philamdasigma.org</a></td>
</tr>
<tr>
<td>Rho Chi</td>
<td>Academic pharmacy honor</td>
<td><a href="http://www.rhoechi.org">www.rhoechi.org</a></td>
</tr>
<tr>
<td>Rho Pi Phi</td>
<td>Pharmaceutical fraternity</td>
<td><a href="https://rhopiphi.com">https://rhopiphi.com</a></td>
</tr>
<tr>
<td>Society of Infectious Diseases Pharmacists (SIDP)</td>
<td>Infectious diseases pharmacy and antimicrobial stewardship</td>
<td><a href="http://www.sidp.org">www.sidp.org</a></td>
</tr>
<tr>
<td>Student National Pharmacy Association (SNPhA)</td>
<td>Student pharmacists and minority representation</td>
<td><a href="http://www.snpha.org">www.snpha.org</a></td>
</tr>
</tbody>
</table>
The majority of gun owners have firearms because wild game hunting and firearm sports are major leisure activities in some areas of the country. Yet high profile gun violence has opened a new conversation about the topic. While there are no official statistics specifically about violence against visitors, the incidence is low, and overall, the United States is considered a relatively safe place. Nevertheless, as with any country, safety measures are key. Students and faculty members visiting the United States should abide by the safety recommendations provided by their host institution as well as their home institution and avoid unsafe areas if possible. Also, if driving a car, it is important to lock car doors, store valuables in the trunk, and avoid stopping for anyone other than appropriately identified law enforcement officials.

Lack of Cultural Awareness. Americans are often portrayed in news and entertainment as disinterested in the rest of the world and unaware that anything exists outside the boundaries of the United States. Because of this, Americans are sometimes stereotyped as being less versed in other cultures, other languages than English, and the historical, political and societal issues impacting the rest of the world. The fact that approximately 70% of Americans do not have passports contributes to this stereotype. However, in 2006, Americans were ranked third in the world in terms of the number of trips taken abroad (58 million trips), with Germans ranked first (86.6 million). Also, Americans have so much to see and visit in their own vast and diverse country that many of them elect to spend their vacations exploring the United States. Overall, Americans are very friendly and interested in talking to visitors and learning about their culture and background.

External Politics. Many perceive that the United States acts as “the world’s policemen.” Interventions and regime changes led by the US military in many parts of the world contribute to this stereotype. Some people also believe the United States is determined to dominate the world, especially with its widespread military presence. Having US military bases in some Arab countries and giving US military aid to Israel are points of friction in relationships between the United States and many Arab countries, and were claimed to be the reasons why terrorists directed by Osama Bin Laden attacked America on September 11, 2001. The US military bases in Japan have also been associated with negative publicity and frictions with Japan. In addition, the perceived US support for dictators and subsequent wars in Afghanistan and Iraq led to anti-American sentiment in several countries. However, visitors should not assume that their American hosts agree with all of the actions of their government. Many Americans enjoy discussing politics, so if you have questions, feel free to ask your host about their views.

In contrast to the above perceptions of the United States, the American government sends aid to many countries around the world and is always at the forefront of operations to send food and supplies to countries after international disasters. Private American citizens are also very charitable, whether inside the United States or traveling or working abroad. A study in 2011 reported that the United States had climbed from fifth to first among 153 countries in volunteering, helping strangers, and donating money.

Racism. The United States’ history of slavery, discrimination against minorities, and media coverage of what is perceived as racial profiling and police brutality against minorities, in addition to some emerging nationalistic ideologies within the country, contribute to other countries’ portrayal of the American people as racists. Visitors may also see that many neighborhoods are still comprised primarily of a particular ethnic group, and this may strengthen their negative beliefs about Americans. Certainly, racism and other isms are still major issues in America today. Host institutions should consider addressing these issues with visitors during orientation. Visitors from Muslim countries may also experience negative sentiments and confrontation based on their religion and practices. This is more likely to occur in public rather than in professional settings. Regardless, staying calm, avoiding confrontation, and reporting such incidents to authorities or their hosts when merited is helpful. Visitors should also set aside any preconceived stereotypes they may have regarding US minority populations and treat all people respectfully.

Workaholism. Americans are perceived as workaholics with skewed work-life balances. Compared to
West Europeans, Americans work more weeks and receive less paid vacation time.\textsuperscript{113,114} A 2014 study estimated that 169 million vacation days, which equate to more than $52 billion in benefits, went unused by American workers.\textsuperscript{130,131} However, an active night life and social drinking are part of the American culture, especially among young people. Host institutions should consider educating visitors, particularly students, about the dangers associated with such activities, what to watch for, what to avoid, and how to not get carried away or lose control.

\textbf{Life, Liberty, and the Pursuit of Happiness.} A well-known phrase in the US Declaration of Independence is "Life, Liberty, and the Pursuit of Happiness."\textsuperscript{132} Americans firmly trust in the idea of independence and personal freedom. The American Declaration of Independence expresses that "all men are created equal," and this conviction is profoundly reflected in American society. Americans believe that all individuals are of equal social standing and therefore may feel awkward when clear demonstrations of regard are shown to them, for example, being bowed to, as is the custom in some countries. This confidence in the equality of all people makes Americans behave somewhat casually with others, even upon first meeting them. Americans also tend to value candor and receptiveness in their dealings with people. They believe that contentions and contradictions are best tackled by a straightforward exchange among the people involved.\textsuperscript{133}

\textbf{Pharmacy Practice.} With regard to pharmacy practice, many visiting pharmacy students and faculty may have the perception that all US pharmacists practice in clinical settings and perform only clinical work. This is a misconception. The majority of pharmacists in the US spend a large portion of their time dispensing medications in community pharmacies and hospitals without any true clinical interaction with patients. However, the role of ambulatory care pharmacists is growing fast.\textsuperscript{134,135}

\textbf{Recommendations for Culturally Sensitive Engagement When Coming to the US} For many international students and faculty members coming to the United States, getting accustomed and adapting to American culture can be challenging and at times uncomfortable. American traditions and culture, as mentioned above, may be altogether different from those of the guests’ home country and they may think Americans are confusing or even rude. These traditions, customs, and cultures vary depending upon the region and even the city within a region. Visitors need to acquaint themselves with American culture in general and seek guidance about cultural norms in the locations being visited prior to arriving in the United States. This will allow for a more enjoyable experience and prevent making incorrect assumptions or conclusions. Americans can often act in a casual, friendly, and personal manner and those who do not come from a similar culture should try not to mistake this for impoliteness or flippancy. Visitors should take care to be as direct in their communications as possible and ensure that any misunderstandings are clarified promptly, particularly in the professional setting. Americans themselves can have conscious or unconscious bias towards other people and regions within their own country. Visitors should be aware of this subtext when discussing other areas of the country and remain open-minded.

\textbf{Recommendations for Culturally Sensitive Engagement for Pharmacy and Other Health Care Professionals} With recent advances in the pharmacists’ role and globalization of US pharmacy education and practice, international programs are seeking increased student and faculty opportunities within the United States. Gaining a better understanding of the United States as a country, US culture, the US health care system, pharmacy education and practice in the United States, and stereotypes about America and American people is critical. People from different ethnic groups may have different beliefs about their medical conditions and the medications used to treat these conditions, so an awareness of the different cultures found in the particular area of the United States where the guest will be practicing should be developed. Conversely, the visitor might be able to provide helpful insight on treating patients from their home culture if they visit an area with a high concentration of their former compatriots. Visitors may find it helpful to review the US Code of Ethics for Pharmacists\textsuperscript{136} to better understand the practices, which are considered standard and the norm in US professional culture. In addition, pharmacy practice varies widely from state to state, so guests should become familiar with the pharmacy laws that govern pharmacy practice in the area visited in order to know what services they will be able to provide.

\textbf{CONCLUSION} American culture is prevalent and influential throughout the world. Visitors to the United States, especially those from large international cities, will probably already be familiar with many aspects of American culture. However, because of the diversity of the United States, international media coverage, and America’s external policies, some stereotypes may exist in the minds of many visitors. Visitors should become familiar with the
diversity of the American culture and the common stereotypes that exist in the United States in order to have a positive experience. In addition, while pharmacy education and practice in the United States are advanced, many challenges remain, and some US institutions and pharmacists are still struggling with issues similar to those of other programs and pharmacists around the world. Because of this, in any global engagement program, the knowledge and experience of visitors should be as valued as those of the hosts for the program to be mutually beneficial to both parties.

ACKNOWLEDGMENTS
We acknowledge Dr. Aiyana Ooki for assisting with the literature search for this review, and Dr. Jennifer Prisco for her valuable review of the final draft of this manuscript.

REFERENCES


